144,000 in Ontario) over a 10-year horizon, from provincial Ministry of Health (MoH) and societal perspectives. For Québec, costs and benefits of adding acellular pertussis to combined diphtheria-tetanus vaccine (DacPT) in schools were compared to the current practice of administering the diphtheria-tetanus vaccine only. In Ontario, we assumed co-administration of the new vaccine with Hepatitis B vaccine. Efficacy and utilisation data (vaccination, management of pertussis infection and hospitalization) were derived from the literature. Productivity loss of parents and older adolescents was estimated. Standard cost lists were used (CAD$), discounted at 3%. **RESULTS:** From the MoH perspective, the expected additional cost of DacPT per adolescent over 10 years was $5.80 for Québec and $3.19 for Ontario; the respective expected incremental cost-effectiveness ratios were $184.83 and $101.73 per pertussis case avoided. From the societal perspective, the additional 10-year cost would be $2.70/adolescent with an expected incremental cost-effectiveness ratio of $86.03 per case avoided in Québec, while in Ontario there would be savings of $6.67 per adolescent. In Québec, more than 2760 pertussis cases would be prevented, and 4520 in Ontario. **CONCLUSION:** This study suggests that administering a booster dose of DacPT at age 12, may reduce the burden of pertussis at a reasonable cost, potentially with savings to society. The impact of implementing the new programme is lower in Ontario, as it assumes additional savings by shifting administration of the vaccine from the physician to the school.

PIN42

COST OF VARICELLA IN POLAND

Glogowski CA[1], Gierczynski JM[1], Splawinski J[2]
[1]GlaxoSmithKline Pharmaceuticals S.A, Warsaw, Poland; [2]Independent Centre for Economic and Pharmaceutical Research, Warsaw, Poland

OBJECTIVE: To assess the cost of varicella infections in Poland from payers and societal perspectives as a part of evaluation of cost-effectiveness of varicella vaccination. Background: Mass vaccination against varicella is possible as safe, effective, and providing life-long protection vaccine (Varilrix) became available and the possibility that vaccination would shift varicella infections to older age groups seems remote. **METHODS:** We collected data of medical and non-medical resources used by patients suffering from varicella. Medical costs were taken from local health services price lists and retail prices of drugs were used. All local prices were changes into dollars. Epidemiological data were taken from national health statistics data for 2000: incidence 331.3/100,000, prevalence 12,8016, hospitalisations 1008 and 2 deaths. Main assumptions (based on experts panel): 2 doctors visits, antihistaminics, analgesics, antipyretic, antiviral, and antibiotics, and 4 days loss of productivity—all for one case. **RESULTS:** Direct cost per case accounted to 49.12 USD and indirect cost per case, to 91.64 USD. Total cost per case was: 140.76 USD. Total annual cost per population was 11,050,867 USD with 5,771,872 USD of direct costs and 5,278,995.7 USD of indirect costs. **CONCLUSION:** Varicella has considerable burden on Polish health care system. As safe and long-term effective vaccine against varicella is available in Poland, cost-effectiveness and cost-benefit analyses will be performed.

PIN43

THE EFFECT OF HEALTH PERCEPTION IN MODIFYING TOTAL HEALTH CARE EXPENDITURES WITHIN AN IMMUNIZED ELDERLY UNITED STATES POPULATION

Patterson ME
University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

OBJECTIVES: Even though influenza vaccinations have been shown to decrease morbidity, mortality, and hospitalization costs among seniors in the United States, vaccination rates among seniors remain below national standards. Positive health perceptions may decrease immunization seeking behavior, and indirectly increase medical expenditures. This analysis investigates the main effect of immunization status as well as the interaction between health perception and immunization status on total medical expenditures in the elderly. **METHODS:** Participants included 1350 individuals aged 65 and older with non-zero total medical expenditures who responded to the 1996 University of Michigan Health Retirement Survey (HRS) survey. Total medical expenditures were measured as out-of-pocket or insurance spent between 1994 and 1996. Positive vaccination status was assigned to individuals who self-reported receiving an influenza shot between 1994 and 1996. Ordinary Least Squares (OLS) was used to estimate medical expenditures in the final multivariate model. **RESULTS:** The vaccinated elderly population had on average 35% higher total medical expenditures than the non-vaccinated population, after controlling for perceived health status, functional limitations, age, gender, race, income, education, and marital status. Self-reported health status did not modify the association between vaccination status and medical expenditures ($F(4,1302) = 1.40$, $p = 0.2319$). **CONCLUSIONS:** Immunized seniors spend more on medical care than non-immunized seniors, suggesting that seniors seeking immunizations utilize the health system more frequently. Perceived health status was not found to be an effect modifier, suggesting that the association between a senior's immunization status and their medical costs is independent of how they perceive their own health. Since this cross-sectional analysis has limitations in drawing conclusions of the effect of immunizations on medical expenditures, future studies need to employ longitudinal analysis to further investigate the role of perceived health status among non-vaccinated elder populations. Understanding this role will contribute to

improving national influenza vaccination rates among the elderly.

PIN44

THE COST OF SEVERE SEPSIS AT A TERTIARY CARE TEACHING INSTITUTION

Meyer KL[1], Faris R[2], Rowden A[3]
[1]Applied Health Outcomes, Tampa, FL, USA; [2]University of Tennessee, Memphis, TN, USA; [3]The Johns Hopkins Hospital, Baltimore, MD, USA

OBJECTIVE: To determine the cost of treating an intensive care unit (ICU) patient with severe sepsis who expires while hospitalized at The Johns Hopkins Hospital (JHH), prior to the introduction of drotrecogin alfa (activated) for the treatment of severe sepsis. **METHOD:** The study utilized a cost-of-illness methodology. Data were collected through retrospective chart review. Patients with sepsis were identified based on their discharge summary in an integrated patient care database at JHH. Patient selection included those hospitalized between October 1, 2000 and September 30, 2001, in an adult ICU, who expired prior to hospital discharge. A random sample of these patients was chosen for chart review. Chart review identified patient status based on the PROWESS study inclusion criteria for the diagnosis of severe sepsis. Cost-of-illness calculation included direct medical costs (medications, hospital days, and ICU days). The cost to the hospital was calculated using the cost-to-charge ratio specific for JHH. Indirect costs were not included. **RESULTS:** A total of 60 patients were included in the study. The mean total hospital, non-ICU, ICU, and sepsis-related lengths of stay were 24, 8, 16, and 18 days, respectively. Patients spent a mean of 67% of hospitalized days in the ICU. The mean total hospitalization cost for a patient with severe sepsis who expires was approximately $54,000 and the mean sepsis-related hospitalization cost for one of these patients was approximately $40,000. The mean total costs per day (medication costs per day in parentheses) for the entire hospitalization, non-ICU stay, ICU stay, and sepsis-related stay were $2270 ($313), $1512 ($210), $2649 ($364), and $2245 ($339), respectively. **CONCLUSION:** Sepsis is a condition that has a significant impact on patient mortality and hospital costs. The results of this study will be used to monitor the effect of the use of drotrecogin alfa (activated) for the treatment of severe sepsis at JHH.

INFECTION—Quality of Life/Preference Based Outcomes

PIN45

THE COST EFFECTIVENESS OF PI BASED THERAPY WITH NELFINIVIR (NLF) COMPARED TO RITONAVIR (RTV) FOR PATIENTS WITH HIV/AIDS

Anis AH[1], Sun H[1], Woolcott JC[1], Vinduska B[2], Walmsley S[3]
[1]University of British Columbia, Vancouver, BC, Canada; [2]Canadian HIV Trials Network, Vancouver, BC, Canada; [3]Toronto Hospital (General), Toronto, ON, Canada

OBJECTIVE: CPCRA-042/CTN-02, was a binational, randomized, open label trial in patients with advanced HIV receiving either Nelfinivir (NLF) or Ritonavir (RTV). A pharmacoeconomic (PE) sub-study of consenting Canadian participants prospectively captured health resource utilization (HRU) and Quality of Life (QOL) data. Our objective was to assess costs, effects and incremental cost-effectiveness of NLF compared to RTV as Protease Inhibitor therapy. **METHOD:** The PE sub-study recruited from 13 Canadian sites. Data collected included HRU and QOL as measured by a VAS and SF12 every 4 months. Costs were estimated using the St. Paul's Hospital (SPH) formulary, SPH Cost Model, and BCMA fee schedule. Using intent to treat analysis, the annual incremental cost effectiveness ratio (ICER) was calculated. **RESULTS:** In the main study, there was no difference in the time to clinical progression, immunologic or virologic responses between the two study arms. In PE sub-study, 137 patients were randomized: NLF (n = 71) or RTV (n = 66). The median (Q1–Q3) baseline patient age was 38 years (33–44), with median CD4+ count of 36/mm^3 (12–70). Total follow-up time was ≥3 years. Preliminary results show mean (SD) first year annual total cost for NFV patients to be $26,099 (14,800) and $20,475 (7591) for RTV patients; $p < 0.001$. QOL scores showed no significant difference among groups at one year. The number of patients switching initially assigned study drug due to toxicity was lower for the NLF group 19 (27%) vs. 26 (39%) at one year and 8 (12%) vs. 24 (36%) in the first 8 months. The annual ICER per switch avoided equaled $24,071 per patient. **CONCLUSION:** The overall total cost and tolerability with assigned therapy were both higher for NLF. Given equal efficacy and immunologic response, the choice for one drug over the other as initial therapy depends on the importance placed on tolerability of the start-up regimen and potential for the emergence of drug resistance.

PIN46

HIV/AIDS PATIENTS: EXPERIENCES WITH HOSPITALIZATION

Wolosin R
Press Ganey Associates, Inc, South Bend, IN, USA

OBJECTIVES: Even with the advent of new pharmacotherapies (e.g., HAART) that minimize inpatient care, HIV/AIDS patients are sometimes hospitalized for acute problems. Patients' responses to specific aspects of hospitalization determine their satisfaction and have implications for hospitals' quality improvement efforts. The objective of this study was to examine ratings of hospitalization experiences of HIV/AIDS inpatients and compare them with ratings of other, non HIV/AIDS inpatients. **METHODS:** A set of surveys from 78 patients discharged from 32 US hospitals in 2001 was assembled. Surveys contained 49 items pertaining to aspects of hospitalization as well as several patient demographic items. Surveys had been pre-coded to include diagnostic information (Diagnosis-Related Group (DRG)) and were